

## **Federal Operating Permit Article 1**

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Strongwell Corporation
Facility Name:	Strongwell Corporation-Bristol Division
Facility Location:	400 Commonwealth Avenue Bristol, Virginia
Registration Number:	10211
Permit Number:	SWRO10211

Effective Date: April 6, 2006

Expiration Date: April 5, 2011

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David K. Paylor  
Director, Department of Environmental Quality

Signature Date: April 3, 2006

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MACT, Subparts PPPP, WWWW and N

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## **I. Facility Information**

### **Permittee**

Strongwell Corporation  
P. O. Box 580  
Bristol, Virginia 24203-0580

### **Responsible Official**

John E. Barker  
Corporate Manager of Environmental Affairs

### **Facility**

Strongwell Corporation-Bristol Division  
400 Commonwealth Avenue  
Bristol, Virginia 24203

### **Contact Person**

John E. Barker  
Corporate Manager of Environmental Affairs  
(276) 645-8129

**County-Plant Identification Number:** 51-520-00018

**Facility Description:** NAICS 326199 – Strongwell Corporation manufactures fiberglass reinforced plastics at their Bristol Division facility using pultrusion and molding processes.

The pultrusion process involves drawing reinforced fibers through a liquid resin mixture. The saturated fibers are then pulled through forming guides and into a heated die. The resin chemically reacts in the die creating a solid, hard finished part as the material exits. The profile produced is then cut to length. Pultrusion resins have two basic components: base resin and monomers.

The molding process involves pouring a resin/fiberglass slurry into molds and curing.

Volatile organic compounds (VOC) and hazardous air pollutant (HAP) emissions result from evaporation of monomers during both processes. Additional VOC and HAP emissions occur during spray painting of various plastic parts and bonding of metal fittings to fiberglass rods.

## II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
B-1	B-1	One Eclipse 200 hp natural gas/No.2 fuel oil-fired tube boiler	8.375 MMBtu/hr heat input	None	----	----	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
B-2	B-2	One Cleaver Brooks 150 hp natural gas/No. 2 fuel oil-fired tube boiler, model CB-150p	6.277 MMBtu/hr heat input	None	----	----	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
B-3	B-3	One Williams and Davis 200 hp natural gas/No. 2 oil-fired tube boiler, model 777	8.4 MMBtu/hr heat input	None	----	----	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
<b>Spray Coating Equipment</b>							
PB-1	PB-1	One 16' x 28' x 7' booth	6 lb /hr	16' x 28' x 7' booth equipped with paper filters	PB-1	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PB-2	PB-2	One PA ASCHE Airbrush Co., 16' x 24' x 9' paint spray booth	6 lb /hr	PA ASCHE Airbrush Co., 16' x 24' x 9' spray filter booth equipped with paper filters	PB-2	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Pultrusion Equipment</b>							
PM-1 through PM-5	DC-4 and DC-3	Strongwell, 4 cavity model, 5 machines	300 lb/hr input, each	DC-3: Farr Tenkay 40L C74122-3 7, filtered dust collector; DC-4: Farr Tenkay 241S C74881-4-B, filtered dust collector	DC-4 and DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-6 through PM-8, PM-10, PM-11, PM-13, PM-47 through PM-49	DC-4 and DC-3	Strongwell, 2 cavity model, 9 machines	150 lb/hr input, each, except PM-13, which is 130 lb/hr	DC-3: Farr Tenkay 40L C74122-3 7, filtered dust collector; DC-4: Farr Tenkay 241S C74881-4-B, filtered dust collector	DC-4 and DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-14 through PM-23	DC-3	Strongwell, single cavity 6 inch model, 10 machines	130 lb/hr input, each	Farr Tenkay 40L C74122-3 7, filtered dust collector	DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-24	DC-3	Strongwell, single cavity 30 inch model, one machine	300 lb/hr input	Farr Tenkay 40L C74122-3 7, filtered dust collector	DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-25	DC-3	OEM, Inc. small rod machine, one machine	50 lb/hr input	Farr Tenkay 40L C74122-3 7, filtered dust collector	DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-26	DC-3	Strongwell, single cavity, one machine	300 lb/hr input	Farr Tenkay 40L C74122-3 7, filtered dust collector	DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Pultrusion Equipment</b>							
PM-9 and PM-27	DC-4 and DC-3	PTI 3008 Pultrusion, two machines	300 lb/hr input, each	DC-3: Farr Tenkay 40L C74122-3 7, filtered dust collector; DC-4: Farr Tenkay 241S C74881-4-B, filtered dust collector	DC-4 and DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-28	DC-3	Pulstar 3008 pultrusion, one machine	300 lb/hr input, each	Farr Tenkay 40L C74122-3 7, filtered dust collector	DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05))
PM-29	DC-3	Strongwell, 3 cavity model, one machine	200 lb/hr input	Farr Tenkay 40L C74122-3 7, filtered dust collector	DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-30 through PM-35 and PM-37 through PM-40	DC-1	Strongwell, single cavity 14 inch model, 10 machines	150 lb/hr input, each	Arrington-Curtis No.2, filtered dust collector	DC-1	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-36	DC-1	Strongwell, 60 inch model, one machine	500 lb/hr input	Arrington-Curtis No.2, filtered dust collector	DC-1	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-42	-----	Strongwell, single cavity 6 inch model, one machine	100 lb/hr input	Fabric filtration through an individual filter bag attached to the machine	-----	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-43 and PM-44	DC-3	Glastrusion pultrusion, 2 machines	150 lb/hr input, each	Farr Tenkay 40L C74122-3 7, filtered dust collector	DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Pultrusion Equipment</b>							
PM-46	DC-8	Strongwell, single cavity model, one machine	500 lb/hr input	W.W. SYL Pactecon filtered dust collector	DC-8	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-50	DC-3	Strongwell, single cavity tube model, one machine	200 lb/hr input	Farr Tenkay 40L C74122-3 7, filtered dust collector	DC-3	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
PM-90	DC-8	Strongwell, single cavity model, one machine	750 lb/hr, input	W.W. SYL Pactecon filtered dust collector	DC-8	Particulate	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
<b>Open Molding Operation</b>							
M.G.1	No stack	Various Strongwell open molds	108 ft <sup>2</sup> /hr	None	-----	-----	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
<b>Chromium Electroplating Operation</b>							
CP-1	CP-2	Rapid Electric Technologies D.C. Power, 3000 Amp, 2-12 V, 36 KW	8 lb/hr	KCH Spectra 5/4000 composite mesh-pad system	CP-2	Hexavalent chromium	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
<b>Resin Mixing and Storage Equipment</b>							
Mix	No stack	Strongwell resin mixing room	5 tons/hr output	Enclosed mixing and material transfer system	-----	VOC and HAP	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
T-1 through T-6	No stack	Resin bulk storage tanks	6,768 gallons storage capacity, each	None	-----	-----	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
T-8	No stack	Solvent bulk storage tank	2,401 gallons storage capacity	None	-----	-----	4/13/99 (as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

\*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.



### **III. Fuel Burning Equipment Requirements: B-1, B-2 and B-3**

#### **A. Limitations**

1. Emissions from the operation of each fuel burning unit including the Eclipse 200 hp fire tube boiler (B-1), Cleaver Brooks 150 hp fire tube boiler (B-2), and Williams and Davis 200 hp fire tube boiler (B-3), shall not exceed the limits specified below:

Particulate Matter                      0.48    lb/MMBtu

(9 VAC 5-40-900 and 9 VAC 5-80-110)

2. Total sulfur dioxide emissions from the operation of the fuel burning installation which includes the Eclipse 200 hp fire tube boiler (B-1), Cleaver Brooks 150 hp fire tube boiler (B-2), and Williams and Davis 200 hp fire tube boiler (B-3), shall not exceed the limit specified below:

Sulfur Dioxide                          60.86 lbs/hr

(9 VAC 5-40-930 and 9 VAC 5-80-110)

3. Visible emissions from each of the boiler stacks, B-1, B-2, and B-3, shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.  
(9 VAC 5-50-80 and 9 VAC 5-80-110)

4. Emissions from each boiler shall be controlled by proper operation and maintenance in accordance with the manufacturer's recommendations at minimum. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.  
(9 VAC 5-80-110)

5. The approved fuels for each fuel burning unit, B-1, B-2, and B-3, are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 and 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils". A change in fuels may require a permit.  
(9 VAC 5-80-110)

#### **B. Monitoring**

1. The permittee shall have available good written operating procedures and a maintenance schedule for each boiler. These procedures shall be based on the manufacturer's recommendations, at minimum.  
(9 VAC 5-80-110)

2. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of distillate oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
  - e. The sulfur content of the oil.(9 VAC 5-80-110)
3. Visible emission observations shall be performed on each boiler exhaust stack, B-1, B-2, and B-3, at least once each week during periods of normal unit operation for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed during these weekly observations, or at any other time, visible emissions evaluations in accordance with 40 CFR 60, Appendix A, Method 9 shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed twenty percent (20%), the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 evaluation shall not be required if the visible emissions condition is corrected as expeditiously as practicable such that no visible emissions are present; the emissions unit is operating at normal conditions; and the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.  
(9 VAC 5-50-20 and 9 VAC 5-80-110 K)

### **C. Recordkeeping**

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
  - a. Written operating procedures, maintenance schedules, and operational adjustments for each fuel burning unit, B-1, B-2, and B-3, which can be used to determine emissions.
  - b. Initial and periodic operator training which shall include, at minimum: (i) the date of training and the names of the trainer and trainees, (ii) the type of training (initial, periodic, etc.), and (iii) a copy of the training material.
  - c. All fuel supplier certifications.
  - d. Visible emissions observations and evaluations.

- e. Emission factors and equations used to calculate actual emission rates of particulate matter and sulfur dioxide.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110)

#### **D. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
SO <sub>2</sub>	EPA Method 6
PM/PM-10	EPA Method 5, 17
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

### **IV. Process Equipment Requirements – Spray Coating Equipment: PB-1 and PB-2**

#### **A. Limitations**

1. The permittee shall operate the spray coating equipment, PB-2, in compliance with all applicable National Emission Standards for Hazardous Air Pollutants, Subpart P, National Emission Standards for Surface Coating of Plastic Parts and Products, 40 CFR 63.4480 through 40 CFR 63.4581 and 40 CFR Part 63, Subpart A, General Provision as identified by Tables 1 through 4 for Subpart P.  
(9 VAC 5-80-110, 9 VAC 60-100 Subparts A and P, 40 CFR 63.1 and 40 CFR 63.4481)
2. Particulate emissions from each spray booth, PB-1, and PB-2, shall be controlled by paper filters or equivalent. Each spray booth shall be provided with adequate access for inspection.  
(9 VAC 5-80-110 and Condition 3 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
3. Spray booth PB-2 shall not operate more than 2,040 hours per year. Annual hours of operation shall be calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 8 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

4. Throughput of Sherwin Williams Polane coatings or equivalent, as described in the January 29, 1993 permit application, to spray booth PB-2 shall not exceed 6 pounds per hour and 6.12 tons per year with a volatile organic compound percent by weight not to exceed the following:

<u>Coating Type</u>	<u>Percent Weight VOC</u>
Reducer	100%
Catalyst	40%
Paint	76.5%

Annual consumption shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110 and Conditions 12 and 13 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

5. Emissions from the operation of spray booth PB-2 shall not exceed the limits specified below:

Volatile Organic Compounds	6.7 lbs/hr	4.5 tons/yr
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Annual emissions shall be calculated as the sum of each consecutive 12-month period.

(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 14 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

6. Visible emissions from each spray booth, PB-1, and, PB-2, shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition 18 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
7. Emissions of organic hazardous air pollutants (HAP) from spray booth PB-2 shall not exceed 0.16 pound of organic HAP emitted per pound of coating solids used, calculated monthly as the sum of each consecutive 12-month period. This condition applies at all times.  
(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart PPPP, 40 CFR 63.4490(b)(1) and 40 CFR 63.4500(a)(1))
8. The permittee shall use at least one of the following options to comply with the emission limit in Condition IV.A.7 of this permit:
- Compliant Material option: The organic HAP content of each coating used in the coating operation(s) shall be less than or equal to 0.16 pound of organic HAP per pound of coating solids, and each thinner and/or other additive, and cleaning material used shall contain no organic HAP.
  - Emission Rate Without Add-On Controls option: Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the

coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to 0.16 pound of organic HAP per pound of coating solids, calculated monthly as the sum of each consecutive 12-month period.

Either of the compliance options may be applied to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. Different compliance options may be used for different coating operations, or at different times on the same coating operation. Different compliance options may be used when different coatings are applied to the same part, or when the same coating is applied to different parts. However, different compliance options may not be used at the same time on the same coating operation.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart PPPP, and 40 CFR 63.4491(a) and (b))

## **B. Monitoring**

1. Visible emissions observations shall be performed on each spray booth exhaust, PB-1, and, PB-2, at least once each day during periods of normal unit operation for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed during these daily observations, or at any other time, visible emissions evaluations in accordance with 40 CFR 60, Appendix A, Method 9 shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed five percent (5%), the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 evaluation shall not be required if the visible emissions condition is corrected as expeditiously as practicable such that no visible emissions are present; the emissions unit is operating at normal conditions; and the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.  
(9 VAC 5-50-20 and 9 VAC 5-80-110 K)
2. To demonstrate compliance with the Compliant Material option, the permittee shall:
  - a. Determine the mass fraction of organic HAP for each material using 40 CFR 63, Appendix A, Method 311, 40 CFR 60, Appendix A, Method 24, information from the material supplier or manufacturer, or an alternative method approved by the Administrator. The mass fraction of organic HAP for solvent blends shall be determined in accordance with 40 CFR 63.4541(a)(5).
  - b. Determine the mass fraction of coating solids for each coating using 40 CFR 60, Appendix A, Method 24, information from the material supplier or manufacturer, or an alternative method approved by the Administrator.
  - c. Calculate the organic HAP content of each coating by dividing the mass fraction of organic HAP in the coating by the mass fraction of coating solids.

All calculations shall be conducted monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart PPPP, 40 CFR 63.4540, 40 CFR 63.4541 and 40 CFR 63.4542)

3. To demonstrate compliance with the Emission Rate Without Add-On Controls option, the permittee shall:
  - a. Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in Condition IV.B.2.a of this permit.
  - b. Determine the mass fraction of coating solids for each coating used during each month according to the requirements in Condition IV.B.2.b of this permit.
  - c. Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, supplier or manufacturer information, or reference sources providing density or specific gravity data for pure materials.
  - d. Determine the volume of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records.
  - e. Calculate the mass of organic HAP emissions in accordance with 40 CFR 63.4551(e). The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials.
  - f. Calculate the total mass of coating solids used in accordance with 40 CFR 63.4551(f). The total mass of coating solids used is the combined mass of coating solids for all coatings used during each month.
  - g. Calculate the organic HAP emission rate for the compliance period in accordance with 40 CFR 63.4551(g). When calculating the organic HAP emission rate, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which the Compliant Material option was used.

All calculations shall be conducted monthly, as the sum of each consecutive 12-month period.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart PPPP, 40 CFR 63.4550, 40 CFR 63.4551 and 40 CFR 63.4552)

### **C. Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such

records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. Visible emissions observations and evaluations.
2. Operating procedures, scheduled and unscheduled maintenance of all air pollution control equipment based on the manufacturer's recommendations, at minimum.
3. Monthly and annual hours of operation of spray booth PB-2. Annual hours of operation shall be calculated monthly as the sum of each consecutive twelve (12) month period.
4. Hourly, monthly and annual throughput of each type of coating through spray booth PB-2. Hourly throughput shall be calculated by dividing monthly throughput of each type of coating to spray booth PB-2 by monthly hours of operation of spray booth PB-2. Annual throughput shall be calculated monthly as the sum of each consecutive twelve (12) month period.
5. Annual emissions of volatile organic compounds (VOC) from spray booth PB-2. Annual emissions shall be calculated and recorded monthly as the sum of each consecutive twelve (12) month period.
6. VOC content of each coating. Except as indicated in Condition IV.C.7, for the purpose of calculating VOC emissions, the VOC content of each coating as supplied, shall be based on formulation data as shown on its MSDS. If VOC content is given as a range, the maximum value shall be used.
7. If the monthly recordkeeping, as required in Condition IV.C.5, indicates that annual VOC emissions are equal to or greater than 50% of the allowable limit in Condition IV.A.5, the VOC content of each material, as supplied, shall be determined quarterly using approved EPA test methods and such content shall be used for the purpose of calculating emissions. The permittee or the supplier shall conduct testing for each product formulation received after such emissions level is determined. Each material shipment received shall be clearly identified by a product formulation number that may be correlated to approved EPA test method results. The most recent test results for each formulation shall be used in emissions calculations. Quarterly testing may be discontinued after actual VOC emissions are below 50% of the allowable limit in Condition IV.A.5 for three consecutive months. If quarterly testing is discontinued, the VOC content determined in the latest test for each formulation shall be used in lieu of the MSDS value in emissions calculations. Quarterly testing of a material is not required if MSDS, manufacturer or vendor information indicates that VOC content of the material has been determined by approved EPA test methods. Quarterly testing of a material is not required if 100% VOC content by weight, for that particular material, is used in emissions calculations.

8. The compliance option used on each coating operation and the beginning and ending dates and times of each compliance option.
9. For the Compliant Material option, calculations of the organic HAP content for each coating.
10. For the Emission Rate Without Add-On Controls option, calculations of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month, total mass of coating solids used each month and the organic HAP emission rate. The organic HAP emission rate shall be calculated monthly as the sum of each consecutive 12-month period.
11. The mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used.
12. The mass fraction of coating solids for each coating used.
13. The date, time, and duration of each deviation, as defined in 40 CFR 63.4542 and 40 CFR 63.4552, from the organic HAP emission limitation.
14. A copy of each notification and report submitted to comply with 40 CFR Part 63 Subpart PPPP.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-60-100 Subpart PPPP, 40 CFR 63.4530, 40 CFR 63.4531 and Conditions 20 and 24 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

#### **D. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 5 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
Visible Emissions	EPA Method 9
Organic HAP	EPA Method 311

(9 VAC 5-80-110)



**E. Reporting**

1. The permittee shall submit to the Director, Southwest Regional Office, a notification of compliance status, in accordance 40 CFR 63.4510(c), Subpart PPPP, no later than 30 calendar days following the end of the initial compliance period. The initial compliance period begins on the compliance date and ends on the last day of the 12<sup>th</sup> month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The compliance date is the date 3 years after April 19, 2004. The notification shall include, at a minimum:
  - a. Company name and address.
  - b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report.
  - c. Date of the report and beginning and ending dates of the reporting period.
  - d. Identification of the compliance option or options used of each coating operation during the initial compliance period.
  - e. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.
  - f. If there were deviations, the following information must be included:
    - (1) A description and statement of the cause of the deviation.
    - (2) If the applicable emission limit was not meet, include all calculations used to determine the pounds of organic HAP emitted per pound coating solids used.
  - g. Example calculations of the following:
    - (1) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.
    - (2) Mass fraction of coating solids for one coating.
    - (3) Density for one coating, one thinner and/or other additive, and one cleaning material, except if the Compliant Material option was used, only the example coating density is required
    - (4) The amount of waste materials and the mass of organic HAP contained in the waste materials for which an allowance is claimed.
  - h. The calculation of pounds organic HAP emitted per pound coating solids used for the compliance option(s) used.

- (1) For the Complaint Material option, provide an example calculation of the organic HAP content for one coating.
  - (2) For the Emission Rate Without Add-on Controls option, provide the calculation of the total mass of organic HAP emission for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using the applicable equations in 40 CFR 63.4551.
- (9 VAC 5-80-110, 9 VAC 5-60-100 Subpart PPPP and 40 CFR 63.4510(c))
2. The permittee shall submit to the Director, Southwest Regional Office, semiannual compliance reports in accordance with 40 CFR 63.4520(a), Subpart PPPP. The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period. The initial compliance period begins on the compliance date and ends on the last day of the 12<sup>th</sup> month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The compliance date is the date 3 years after April 19, 2004. Each report shall include, at a minimum:
  - a. Company name and address.
  - b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report.
  - c. Date of the report and beginning and ending dates of the reporting period.
  - d. Identification of the compliance option or options used on each coating operation during the reporting period. If a switch was made between compliance options during the reporting period, the beginning and ending dates for each option used must be reported.
  - e. If the Emission Rate Without Add-On Controls option was used, the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.
  - f. If there were no deviation, the report must include a statement that there were no deviations during the reporting period.
  - g. If the Compliant Material option was used and there was a deviation from the applicable organic HAP content requirements, the report must contain:
    - (1) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.

- (2) The calculation of the organic HAP content for each coating used that deviated from the applicable emission limit.
  - (3) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material used that contained organic HAP.
  - (4) A statement of the cause of each deviation.
- h. If the Emission Rate Without Add-on Controls option was used and there was a deviation from the applicable emission limit, the report must contain:
- (1) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit.
  - (2) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred using the applicable equations in 40 CFR 63.4551.
  - (3) A statement of the cause of each deviation.

The semiannual compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in General Condition XII.C of this permit if the compliance report is submitted along with, or as part of, the semiannual monitoring report and the semiannual compliance report includes all required information concerning deviations from any emission limitation in 40 CFR Part 63, Subpart PPPP. However, submission of a semiannual compliance report shall not otherwise affect any obligation to report deviations from requirements of this permit.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart PPPP and 40 CFR 63.4520(a))

## **V. Process Equipment Requirements – Pultrusion Equipment: PM-1 through PM-90**

### **A. Limitations**

1. The permittee shall operate the pultrusion equipment, PM-1 through PM-90, in compliance with all applicable National Emission Standards for Hazardous Air Pollutants, Subpart WWWW, National Emission Standards for Reinforced Plastic Composites Production, 40 CFR 63.5780 through 40 CFR 63.5935 and 40 CFR Part 63, Subpart A, General Provisions as identified by Tables 1 through 15 of Subpart WWWW.  
(9 VAC 5-80-110, 9 VAC 5-60-100 Subparts A and WWWW, 40 CFR 63.1 and 40 CFR 63.5785)

2. Particulate emissions from cutting operations associated with the pultrusion equipment, PM-1 through PM-90, shall be controlled by fabric filtration. The fabric filters shall be provided with adequate access for inspection.  
(9 VAC 5-80-110 and Condition 4 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
3. Throughput of styrene resin mix to the pultrusion equipment shall not exceed 3,600 pounds per hour and 7,560 tons per year, calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 9 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
4. Throughput of methyl methacrylate resin mix to the pultrusion equipment shall not exceed 300 pounds per hour and 720 tons per year, calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 10 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
5. Throughput of TYBON 289D17 or equivalent phenolic resin mix to the pultrusion equipment shall not exceed 312 pounds per hour and 750 tons per year, calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 11 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
6. Emissions from the operation of all the facility's pultrusion equipment, PM-1 through PM-90, shall not exceed the limits specified below:  

Volatile Organic Compounds	43.32 lbs/hr	92.87 tons/yr
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Annual emissions shall be calculated as the sum of each consecutive 12-month period.  
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 16 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
7. The pultrusion units shall be labeled with their appropriate reference numbers such that labels are readily visible.  
(9 VAC 5-80-110 and Condition 17 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
8. Visible emissions from the fabric filter exhausts shall not exceed 5% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9 VAC 5-50-80, 9 VAC 5-80-110 and Condition 19 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

9. Emissions of total organic HAP from pultrusion operations producing plastic composites using styrene-containing resin shall be reduced by at least 60 weight percent. This condition applies at all times.  
(9 VAC 5-80-110, 9 VAC 6-60-100, Subpart WWWW, 40 CFR 63.5805(a) and 40 CFR 63.5835(a))
10. The permittee shall use one or more of the following control options to comply with the emissions reduction requirement in Condition V.A.9 of this permit:
  - a. Design, install, and operate wet area enclosures and resin drip collection systems on pultrusion machines that meet the following criteria:
    - (1) The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die(s). The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.
    - (2) For open bath pultrusion machines with a radio frequency pre-heat unit, the enclosure must extend from the beginning of the resin bath to within 12.5 inches or less of the entrance of the radio frequency pre-heat unit. If the stock that is within 12.5 inches or less of the entrance to the radio frequency pre-heat unit has any drip, it must be enclosed. The stock exiting the radio frequency pre-heat unit is not required to be in an enclosure if the stock has no drip between the exit of the radio frequency pre-heat unit to within 0.5 inches of the entrance of the die.
    - (3) For open bath pultrusion machines without a radio frequency pre-heat unit, the enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.
    - (4) For pultrusion lines with pre-wet area(s) prior to direct die injection, no more than 12.5 inches of open wet stock is permitted between the entrance of the first pre-wet area and the entrance to the die. If the pre-wet stock has any drip, it must be enclosed.
    - (5) The total open area of the enclosure must not exceed two times the cross sectional area of the puller window(s) and must comply with the following requirements:
      - i. All areas that are open need to be included in the total open area calculation with the exception of access panels, doors, and/or hatches that are part of the enclosure.
      - ii. The area that is displaced by entering reinforcement or exiting product is considered open.
      - iii. Areas that are covered by brush covers are considered closed.

- (6) Open areas for level control devices, monitoring devices, agitation shafts, and fill hoses must have no more than 1.0 inch clearance.
  - (7) The access panels, doors, and/or hatches that are part of the enclosure must close tightly. Damaged access panels, doors, and/or hatches that do not close tightly must be replaced.
  - (8) The enclosure may not be removed from the pultrusion line, and access panels, doors, and/or hatches that are part of the enclosure must remain closed whenever resin is in the bath, except for the time period discussed in Condition V.A.10.a.(9) of this permit.
  - (9) The maximum length of time the enclosure may be removed from the pultrusion line or the access panels, doors, and/or hatches and may be open, is 30 minutes per 8 hour shift, 45 minutes per 12 hour shift, or 90 minutes per day if the machine is operated for 24 hours in a day. The time restrictions do not apply if the open doors or panels do not cause the limit of two times the puller window area to be exceeded. Facilities may average the times that access panels, doors, and/or hatches are open across all operating lines. In that case the average must not exceed the times shown in this paragraph. All lines included in the average must have operated the entire time period being averaged.
  - (10) No fans, blowers, and/or air lines may be allowed within the enclosure. The enclosure must not be ventilated.
- b. Use direct die injection pultrusion machines with resin drip collection systems that meet all the following criteria:
- (1) All the resin that is applied to the reinforcement is delivered directly to the die.
  - (2) No exposed resin is present, except at the face of the die.
  - (3) Resin drip is captured in a closed system and recycled back to the process.
- c. Use a preform injection system where liquid resin is injected to saturate reinforcements in an enclosed system containing one or more chambers with openings only large enough to admit reinforcements. Resin, which drips out of the chamber(s) during the process, shall be collected in closed piping or covered troughs and then into a covered reservoir for recycle. Resin storage vessels, reservoirs, transfer systems, and collection systems shall be covered or shielded from ambient air.
- d. Any combination of options in paragraphs V.A.10.a through V.A.10.c of this condition in which different pultrusion lines comply with different options described in paragraphs V.A.10.a through V.A.10.c of this condition, and:

- (1) Each individual pultrusion machine meets the 60 percent reduction requirement, or
- (2) The weighted average reduction based on resin throughput of all machines combined is 60 percent. For purposes of the average percent reduction calculation, wet area enclosures reduce organic HAP emissions by 60 percent, and direct die injection and preform injection reduce organic HAP emissions by 90 percent.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW and 40 CFR 63.5830(b) – (e))

11. For pultrusion equipment manufacturing parts using styrene-containing resin with 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and having a cross sectional area of 60 square inches or more, the permittee shall at all times:

- a. Not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wet-out area(s),
- b. Not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device,
- c. Use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s),
- d. Direct any compressed air exhausts away from resin and wet-out area(s),
- e. Convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air,
- f. Cover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and
- g. Cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW, 40 CFR 63.5805(a) and 40 CFR 63.5835(a))

## **B. Monitoring**

1. Visible emissions observations shall be performed on each fabric filter exhaust, at least once each day during periods of normal unit operation for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed during these daily observations, or at any other time, visible emissions evaluations in accordance with 40 CFR 60, Appendix A, Method 9 shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed five percent (5%), the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 evaluation shall not be required if the visible emissions condition is corrected as expeditiously as practicable

such that no visible emissions are present; the emissions unit is operating at normal conditions; and the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.

(9 VAC 5-50-20 and 9 VAC 5-80-110 K)

2. Emissions from pultrusion equipment operation shall be calculated using DEQ approved emission factors.  
(9 VAC 5-50-50 and 9 VAC 5-80-110)
3. The permittee shall calculate the organic HAP emissions factor for the pultrusion equipment, PM-1 through PM-90, monthly as the sum of each consecutive 12-month period, which demonstrates compliance with the organic HAP reduction requirement in Condition V.A.9 of this permit.  
(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWW and 40 CFR 63.5900(a)(2))

### **C. Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. Visible emissions observations and evaluations.
2. Operating procedures, scheduled and unscheduled maintenance of all air pollution control equipment based on the manufacturer's recommendations, at minimum.
3. All data, assumptions, and calculations used to determine organic HAP emissions factors for pultrusion equipment, PM-1 through PM-90.
4. A log containing each pultrusion unit and corresponding unit reference number.
5. All times that doors or covers of wet area enclosures are open and there is resin present in the resin bath.
6. A copy of each notification and report submitted to comply with this permit or any applicable requirement.
7. A certified statement of compliance with the work practice requirements in Condition V.A.11 of this permit.
8. Monthly and annual hours of operation of the pultrusion equipment. Annual hours of operation shall be calculated monthly as the sum of each consecutive 12-month period.



9. Monthly and annual throughput of each type resin mix to the pultrusion equipment. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
10. Organic HAP content of each resin.
11. Hourly throughput of each type resin mix to the pultrusion equipment. Hourly throughput of each resin mix shall be calculated by dividing monthly throughput of each resin mix by monthly hours of operation of the facility.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWW, 40 CFR 63.5895(c) and (e), 40 CFR 63.5915, 40 CFR 63.5920 and Conditions 20 and 24 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

#### **D. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 5 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

#### **E. Reporting**

1. The permittee shall submit to the Director, Southwest Regional Office, semiannual compliance reports in accordance with 40 CFR 63.5910, Subpart WWW. The first compliance report must cover the period beginning on the compliance date and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date. The compliance date is April 21, 2006. Each report shall include, at a minimum:
  - a. Company name and address.
  - b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

- c. Date of the report and beginning and ending dates of the reporting period.
- d. If there are no deviations from any applicable organic HAP emissions limitations, and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.
- e. For each deviation from an organic HAP emission limitation or work practice standard, the report must contain the total operating time of each affected source during the reporting period and information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

The semiannual compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in General Condition XII.C of this permit if the compliance report is submitted along with, or as part of, the semiannual monitoring report and the compliance report includes all required information concerning deviations from any organic HAP emissions limitation (including any operating limit) or work practice requirement in 40 CFR Part 63, Subpart WWWW. However, submission of a semiannual compliance report shall not otherwise affect any obligation to report deviations from requirements of this permit.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW and 40 CFR 63.5910)

## **VI. Process Equipment Requirements – Molded Grating Operation: M.G.1**

### **A. Limitations**

1. The total annual throughput of polyester resin or methyl methacrylate resin to the molded grating process, M.G.1, shall not exceed 608.18 tons per year, calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 6 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
2. Annual throughput of styrene monomer to the molded grating process, M.G.1, shall not exceed 79.65 tons per year, calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 7 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
3. Emissions from the molded grating process, M.G.1, shall not exceed the limits specified below:

Volatile Organic Compounds	8.47	lbs/hr	25.45	tons/yr
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Annual emissions shall be calculated as the sum of each consecutive 12-month period.

(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 15 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

## **B. Monitoring and Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. Monthly and annual hours of operation of the molded grating process. Annual hours of operation shall be calculated monthly as the sum of each consecutive 12-month period.
2. Annual throughput of each type resin mix to the molded grating process, calculated monthly as the sum of each consecutive 12-month period.
3. Annual throughput of styrene monomer to the molded grating process, calculated monthly as the sum of each consecutive 12-month period.
4. The permittee shall maintain records of emission factors used to calculate emissions from the molded grating process.
5. A copy of each notification and report submitted to comply with this permit or any applicable requirement.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 20 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)

## **C. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 5 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a

(9 VAC 5-80-110)

## **VII. Process Equipment Requirements – Resin Mixing and Storage Equipment: Mix, T-1 through T-6, and T-8**

### **A. Limitations**

1. The permittee shall operate the resin mixing equipment, Mix, and the storage equipment, T-1 through T-6, and T-8, in compliance with all applicable National Emission Standards for Hazardous Air Pollutants, Subpart WWWW, National Emission Standards for Reinforced Plastic Composites Production, 40 CFR 63.5780 through 40 CFR 63.5935 and 40 CFR Part 63, Subpart A, General Provisions as identified by Tables 1 through 15 for Subpart WWWW.  
(9 VAC 5-80-110, 9 VAC 5-60-100 Subparts A and WWWW, 40 CFR 63.1 and 40 CFR 63.5785)
2. The permittee shall comply at all times with the following work practice standards for mixing and storing styrene-containing resins:
  - a. Use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation.
  - b. Close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding materials or opening the cover for safety.
  - c. Keep mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels.
  - d. Containers that store HAP-containing materials shall be kept closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.  
(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW, 40 CFR 63.5835(a))

### **B. Monitoring and Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. A certified statement of compliance with the work practice requirements in Condition VII.A.2 of this permit.

2. A copy of each notification and report submitted to comply with this permit or any applicable requirement.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW, 40 CFR 63.5915 and 40 CFR 63.5920)

### C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-80-110 and Condition 5 of the 4/13/99 permit as amended 7/6/99, 12/5/02, 1/30/04 and 11/28/05)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a

(9 VAC 5-80-110)

### D. Reporting

1. The permittee shall submit to the Director, Southwest Regional Office, semiannual compliance reports in accordance with 40 CFR 63.5910, Subpart WWWW. The first compliance report must cover the period beginning on the compliance date and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date. The compliance date is April 21, 2006. Each report shall include, at a minimum:
  - a. Company name and address.
  - b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
  - c. Date of the report and beginning and ending dates of the reporting period.
  - d. If there are no deviations from any applicable organic HAP emissions limitations, and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.
  - e. For each deviation from an organic HAP emission limitation or work practice standard, the report must contain the total operating time of each affected source

during the reporting period and information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

The semiannual compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in General Condition XII.C of this permit if the compliance report is submitted along with, or as part of, the semiannual monitoring report and the compliance report includes all required information concerning deviations from any organic HAP emissions limitation (including any operating limit) or work practice requirement in 40 CFR Part 63, Subpart WWWW. However, submission of a semiannual compliance report shall not otherwise affect any obligation to report deviations from requirements of this permit.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW and 40 CFR 63.5910)

## **VIII. Process Equipment Requirements – Chromium Electroplating Operation: CP-1**

### **A. Limitations**

1. The permittee shall operate the chromium electroplating process, CP-1, in compliance with all applicable National Emission Standards for Hazardous Air Pollutants, Subpart N, National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, 40 CFR 63.340 through 40 CFR 63.347 and 40 CFR part 63, Subpart A, General Provisions as identified by Table 1 for Subpart N.  
(9 VAC 5-60-100 Subparts A and N, 40 CFR 63.1 and 40 CFR 63.340)
2. The permittee shall, at all times, including periods of startup, shutdown, and malfunction, operate and maintain the chromium electroplating process, CP-1, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan required by 40 CFR 63.342(f)(3). The required operation and maintenance plan shall include the following elements:
  - a. Operation and maintenance criteria for the affected source, the add-on air pollution control device and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
  - b. Work practice standards for the add-on air pollution control device or monitoring equipment used to comply with subpart N as identified in Table 1 of 40 CFR 63.342;
  - c. Procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and

- d. A systematic procedure for identifying malfunctions of process equipment, add-on air pollution control devices, and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.

The attached operation and maintenance plan entitled, "Strongwell Corporation-Bristol Division Operation and Maintenance Plan", is incorporated here by reference. (9 VAC 5-60-100 Subpart N, 40 CFR 63.342(f)(1)(i) and (f)(3)(i))

3. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by 40 CFR 63.342(f)(3).  
(9 VAC 5-60-100 Subpart N and 40 CFR 342(f)(1)(ii))
4. Emissions from the operation of the chromium electroplating process, CP-1, shall not exceed the limits specified below:

Total chromium                      0.03 mg/dscm

mg/dscm = milligrams per dry standard cubic meter of exhaust air

(9 VAC 5-50-260, 9 VAC 5-60-100 Subpart N and 40 CFR 63.342(c)(1)(ii))

5. The composite mesh-pad system, CP-2, shall be operated such that the overall differential pressure gauge for the system reads between 1.5 and 4.5.  
(9 VAC 5-60-100 Subpart N and 40 CFR 63.343(c)(1)(ii))
6. Visible emissions from the chromium electroplating process exhaust, CP-1, shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.  
(9 VAC 5-50-80 and 9 VAC 5-80-110)

## **B. Monitoring**

1. The permittee shall conduct monitoring of work practice standards as follows:
  - a. Visually inspect, once per calendar quarter, the air pollution control device, CP-2, to ensure there is proper drainage, no chromic acid buildup on the pads, and no evidence of chemical attack on the structural integrity of the device.
  - b. Visually inspect, once per calendar quarter, the back portion of the mesh pad closest to the fan to ensure there is no breakthrough of chromic acid mist.
  - c. Visually inspect, once per calendar quarter, ductwork from the tank to the control device to ensure there are no leaks.
  - d. Perform a wash-down of the composite mesh-pads in accordance with manufacturer recommendations.  
(9 VAC 5-60-100 Subpart N and 40 CFR 63.342(f)(3)(i)(B))

2. The permittee shall monitor, once per calendar day the tank is in operation, the pressure drop across the unit.  
(9 VAC 5-60-100 Subpart N and 40 CFR 63.343(c)(1)(ii))
3. Visible emissions observations shall be performed on the chromium electroplating process exhaust, CP-1, at least once each week during periods of normal unit operation for a sufficient time interval to determine if there are any visible emissions. If visible emissions are observed during these weekly observations, or at any other time, visible emissions evaluations in accordance with 40 CFR 60, Appendix A, Method 9 shall be conducted. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed twenty percent (20%), the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 evaluation shall not be required if the visible emissions condition is corrected as expeditiously as practicable such that no visible emissions are present; the emissions unit is operating at normal conditions; and the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer.  
(9 VAC 5-50-20 and 9 VAC 5-80-110 K)

### **C. Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. Inspections of work practice standards as required in Condition VIII.B.1 above, to include the date of each inspection, name of inspector, identification of the device inspected, a brief description of the device during inspection, and any actions taken to correct deficiencies found during the inspection.
2. All maintenance performed on the process, air pollution control system, and monitoring equipment.
3. All malfunctions of the process, air pollution control device, and monitoring equipment, to include the occurrence, duration, and cause of the malfunction.
4. Actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.
5. Other records necessary to demonstrate consistency with the provisions of the operation and maintenance plan.
6. Test reports documenting the results of performance tests conducted on the affected source.



7. Measurements necessary to determine the conditions of performance tests.
8. Monitoring data as required in Condition VIII.B.2 above to include the control system identification, monitored parameters, and the time and date when the parameter was monitored.
9. Specific identification, including date and time of commencement and completion, of each period of excess emissions as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment.
10. Specific identification, including date and time of commencement and completion, of each period of excess emissions as indicated by monitoring data, that occurs during periods other than malfunction of the process, add-on air pollution control, or monitoring equipment.
11. Total process operating time for the chromium electroplating tank, CP-1.
12. Operation and Maintenance plan. The operation and maintenance plan shall be made available for inspection, upon request, by the DEQ or Administrator for the life of the affected source or until the source is no longer subject to the provisions of 40 CFR Part 63, Subpart N.
13. Visible emissions observations and evaluations.

Unless otherwise required, these records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-60-20D, 9 VAC 5-60-100 Subpart N, 40 CFR 63.342(f)(3)(v) and 40 CFR 63.346)

#### **D. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30, 9 VAC 5-60-20B and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

#### **E. Reporting**

1. The permittee shall submit to the Director, Southwest Regional Office, a report of actions taken during periods of malfunction that are inconsistent with the procedures

- specified in the operation and maintenance plan within two working days after commencing such actions. The report shall be followed by a letter within seven working days after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the Director, Southwest Regional Office. (9 VAC 5-60-20D, 9 VAC 5-60-100 Subpart N and 40 CFR 63.342(f)(3)(iv))
2. The permittee shall submit to the Director, Southwest Regional Office, an Ongoing Compliance Status Report in accordance with 40 CFR 63.347(g), Subpart N, no less than semiannually, to include the following:
    - a. The company name and address of the affected source;
    - b. Identification of the operating parameter that is monitored for compliance determination;
    - c. The relevant emission limitation for the affected source and the operating parameter value or range of values, that correspond to compliance with this emission limitation as specified in the notification of compliance status;
    - d. The beginning and ending dates of the reporting period;
    - e. A description of the type of process performed in the affected source;
    - f. The total operating time of the affected source during the reporting period;
    - g. The actual cumulative rectifier capacity expended during the reporting period, on a month-by-month basis, if the affected source is a hard chromium electroplating tank and the owner or operator is limiting the maximum cumulative rectifier capacity;
    - h. A summary of operating parameter values, including the total duration of excess emissions during the reporting period as indicated by those values, the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emission during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;
    - i. A certification by a responsible official that the work practice standards were followed in accordance with the operation and maintenance plan for the source;
    - j. If the operations and maintenance plan was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report required by the operation and maintenance plan, documenting why the operation and maintenance plan was not followed;
    - k. A description of any changes in monitoring, processes, or controls since the last reporting period;

l. The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

m. The date of the report.

(9 VAC 5-60-20D, 9 VAC 5-60-100 Subpart N and 40 CFR 63.347(g)(3))

## **IX. Facility-Wide Requirements**

### **A. Limitations**

1. For cleaning operations for reinforced plastic composites production equipment subject to 40 CFR Part 63, Subpart WWWW, cleaning solvents that contain HAP shall not be used, except that styrene may be used in closed systems, and organic HAP containing materials may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin. The requirements of this condition do not apply to mold sealing and release agents or to mold stripping and cleaning. This condition applies at all times.  
(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW, 40 CFR 63.5790(c), 40 CFR 63.5805(a) and 40 CFR 63.5835(a))

### **B. Monitoring and Recordkeeping**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. A copy of each notification and report submitted to comply with this permit or any applicable requirement.
2. A certified statement of compliance with the work practice requirements in Condition IX.A.1 of this permit.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW, 40 CFR 63.5915 and 40 CFR 63.5920)

### **C. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
VOC Content	EPA Methods 24, 24a

(9 VAC 5-80-110)

**D. Reporting**

1. The permittee shall submit to the Director, Southwest Regional Office, semiannual compliance reports in accordance with 40 CFR 63.5910, Subpart WWWW. The first compliance report must cover the period beginning on the compliance date and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date. The compliance date is April 21, 2006. Each report shall include, at a minimum:
  - a. Company name and address.
  - b. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
  - c. Date of the report and beginning and ending dates of the reporting period.
  - d. If there are no deviations from any applicable organic HAP emissions limitations, and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.
  - e. For each deviation from an organic HAP emission limitation or work practice standard, the report must contain the total operating time of each affected source during the reporting period and information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

The semiannual compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report required in General Condition XII.C of this permit if the compliance report is submitted along with, or as part of, the semiannual monitoring report and the compliance report includes all required information concerning deviations from any organic HAP emissions limitation (including any operating limit) or work practice requirement in 40 CFR Part 63, Subpart WWWW. However, submission of a semiannual compliance report shall not otherwise affect any obligation to report deviations from requirements of this permit.

(9 VAC 5-80-110, 9 VAC 5-60-100 Subpart WWWW and 40 CFR 63.5910)

**X. Insignificant Emission Units**

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation <sup>1</sup> (9 VAC_)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
WR-1	Grieve model B4-650 natural gas-fired oven	5-80-720 C.2.A.	PM-10, VOC, NO <sub>x</sub> , SO <sub>2</sub> , CO	0.7 MMBtu/hr heat input
T-7	Distillate oil bulk storage tank	5-80-720 B.2.	VOC	8,000 gallons storage capacity
T-9	Powdered clay bulk storage tank	5-80-720 B.1.	Particulate Matter	3,000 cubic feet storage capacity
PBM-2	Pull-Block molding process	5-80-720 B.5.	Methylene Bis Orthocloro Aniline	20 lb/hr, output
FAB	Fabrication and Hand lay-up area	5-80-720 B.2.	VOC and HAP	0.5 ton/hr, output
FRB	Fiber bolt area	5-80-720 B.1.	Particulate Matter	50 lb/hr, output
LBR	Laboratory and burn room	5-80-720 A.18.	Particulate Matter	0.5 lb/hr, output
B-4	Precision, low pressure, natural gas-fire boiler	5-80-720 C.2	PM-10, VOC, NO <sub>x</sub> , SO <sub>2</sub> , CO	0.84 MMBtu/hr heat input

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

## **XI. Permit Shield & Inapplicable Requirements**

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR Part 60, Subpart VVV and 9 VAC 5-50-410	Standards of Performance for Polymeric Coating of Supporting Substrates Facilities	Each coating operation and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates.
40 CFR Part 60, Subpart Kb and 9 VAC 5-50-410	Standards of Performance for Volatile Organic Liquid Storage Vessels	Each storage vessel with a capacity greater than or equal to 40 cubic meters used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984.
40 CFR Part 63, Subpart T and 9 VAC 5-60-100	National Emission Standards for Hazardous Air Pollutants for Source Categories, Halogenated Solvent Cleaning	Each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchlorethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.  
(9 VAC 5-80-140)

## **XII. General Conditions**

### **A. Federal Enforceability**

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

### **B. Permit Expiration**

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5-80-Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5-Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F1 and F5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application  
(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

**C. Recordkeeping and Reporting**

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.  
(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or

application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
  - c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F)

#### **D. Annual Compliance Certification**

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.



4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)  
U. S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

**E. Permit Deviation Reporting**

The permittee shall notify the Director, Southwest regional Office, within four daytime business hours of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition XII.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

**F. Failure/Malfunction Reporting**

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Region.

(9 VAC 5-20-180 C)

**G. Severability**

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

**H. Duty to Comply**

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

**I. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

**J. Permit Modification**

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

**K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

**L. Duty to Submit Information**

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

**M. Duty to Pay Permit Fees**

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.  
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

**N. Fugitive Dust Emission Standards**

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
  2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
  3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
  4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
  5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- (9 VAC 5-40-90 and 9 VAC 5-50-90)

**O. Startup, Shutdown, and Malfunction**

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.  
(9 VAC 5-50-20 E)

**P. Alternative Operating Scenarios**

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

**Q. Inspection and Entry Requirements**

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

**R. Reopening For Cause**

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

**S. Permit Availability**

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

**T. Transfer of Permits**

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.

(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

**U. Malfunction as an Affirmative Defense**

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

- a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

- b. The permitted facility was at the time being properly operated.

- c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.

- d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirement of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.  
(9 VAC 5-80-250)

#### **V. Permit Revocation or Termination for Cause**

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5, Chapter 80, Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

#### **W. Duty to Supplement or Correct Application**

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

#### **X. Stratospheric Ozone Protection**

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

#### **Y. Asbestos Requirements**

The permittee shall comply with the requirements of National Emission Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for

Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).  
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

**Z. Accidental Release Prevention**

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(40 CFR Part 68)

**AA. Changes to Permits for Emissions Trading**

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9 VAC 5-80-110 I)

**BB. Emissions Trading**

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.  
(9 VAC 5-80-110 I)